A Preliminary Analysis of "Tourism Impacts" in Grant County, Wisconsin

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Key Points

- Tourism accounts for approximately 2.6% of Grant County's economy and appears to have declined over the past 15 years.
- Tourism jobs account for approximately 3.1% of the workforce in Grant County, and the number of jobs appears to have declined over the past 15 years.
- In both jobs and wages, the comparative performance of the Grant County tourism economy suggests an apparent decline over the past 40 years as measured by Location Quotient (LQ) Analysis.
- According to state and national indexes, Grant County lags behind in tourism trends, and those apparent lag may be growing—with Grant County apparently experiencing less than half of the growth of other regions.

Background

While "tourism impact" is frequently mentioned, actually determining "tourism impact" in a local economy remains extremely difficult. Perhaps surprisingly, no economic indicator directly tracks tourism. Therefore, all current "tourism impact" amounts are scientific estimates of tourism activity.

One of the primary sources of "tourism impact" data comes from the Wisconsin Department of Tourism's "tourism impact" computer model. The Wisconsin Department of Tourism provides an annual computermodel estimate of "tourism impact" for each Wisconsin county. The computer model is the same for every county in Wisconsin.

The CPI standardized 2014 estimate for tourism in Grant County was \$42,765,211. However, alone, that number tells little about the tourism economy in Grant County over time or from a strategic perspective.

This report opens a discussion on the strategic analysis of tourism in Grant County. This report takes a longer-term view of tourism to suggest trends and to assess overall performance of the Grant County Tourism Economy versus state and national trends. This report relies on data from a number of sources such as the Wisconsin Department of Tourism's "tourism impact" estimates, the Hotel Room Tax, other computer-model estimates, national indexes, and Location Quotient (LQ) analysis. Combined, these multiple sources may help policymakers when forming local tourism policy.

Long-term Analysis of Estimated "Tourism Impact"

Wisconsin uses a complex computer-model to estimate the "tourism impact" in each county because no economic indicators directly track tourism.¹ The Wisconsin Department of Tourism annually releases the official estimates of "tourism impact" for each county in Tourism Impact Reports.² Wisconsin used at least two different computer models over the past 20 years—one model prior to 2010 and a newer model starting in 2010.

Before 2010, the Department of Tourism's allocated 98% of all recreation-related sales to tourism, 30% of all food and beverage sales to tourism (such as any sales in taverns, bars, or restaurants), and 25% of all retail sales to tourism (such as any sales at K-Mart, local retail stores, convenience stores, etc.).³

Table 1: Change in model assumptions by percentages by sector attributed to tourism impact⁴

	Percentage Sales Attributed to Tourism		
Sector	Pre-2010 Model (Old)	2010 Model (New)	
Recreation-related	98%	40%	
Food & Beverage	30%	20%	
Retail	25%	14%	

In 2010, Wisconsin adopted a different tourism model.⁵ The newer model adjusted the estimated percentages of economic activity allocated to tourism. See Table 1 above for the newly allocated percentages.

Due to the change in models and to avoid confusion, the following discussion divides the analysis of "tourism impact" into two parts:

1. Part 1 addressing 1994 to 2010 and

¹ The computer modeling starts with interviews and surveys of actual visits by Wisconsin tourists to estimate tourism patterns in addition to using sophisticated analysis of data. According to an interview with Christopher Pike, Director at Tourism Economics, the current Wisconsin Department of Tourism's tourism impact vendor.

² See Wisconsin Department of Tourism, Wisconsin Economic Impact Research, <u>http://industry.travelwisconsin.com/research/economic-impact</u>.

³ See Wisconsin Department of Tourism, *Key Messages for Wisconsin's Tourism Industry, Economic Impact Research for 2011* (2011).

⁴ The table data summarizes a report released by the Wisconsin Department of Tourism. See Wisconsin Department of Tourism, *Key Messages for Wisconsin's Tourism Industry, Economic Impact Research for 2011, Why does the travel spending figure differ between the two research vendors?*, 2 (2011).

⁵ See Wisconsin Department of Tourism, *Key Messages for Wisconsin's Tourism Industry, Economic Impact Research for 2011* (2011).

2. Part 2 addressing 2010 to 2014.

Please note, the "tourism impact" numbers reported here are adjusted using the Consumer Price Index (CPI) to account for changes that may be due to natural inflation or deflation and not changes in tourism spending itself.⁶ The correction allows a dollar-for-dollar comparison between all years over a long period.



"Tourism Impact" Economic Estimates Part 1: 1994 to 2009

Figure 1: CPI Corrected Annual "Tourism Impact" Estimates from 1994 to 2009

Figure 1 summarizes the annual "tourism impact" estimates for Grant County from 1994 to 2009 (based on the old model). Note the estimates are adjusted to 2015 dollars to make comparison consistent as noted above. From 1994 to 2009, estimated "tourism impact" suggests overall growth—as evident in the dotted line showing the trend. Estimated "tourism impact" increased from about \$61.9 million in 1994 to \$79.6 million in 2009—or about 29% growth over 15 years.

⁶ The Wisconsin Department of Tourism releases year-to-year estimates. Thus, it is natural and normal that a CPI correction would not be applied in that context. The correction becomes more important to allow dollar-to-dollar comparisons when looking at a fairly long time period as occurs in this report. For more information on the need for CPI adjustments, see, for example, the Bureau of Labor Statistics, *BLS Handbook of Methods: Chapter 17*, p.5, available at http://www.bls.gov/opub/hom/pdf/homch17.pdf.

This researcher also verified that a CPI correction was not already applied to the "tourism impact" estimates. Interview with Christopher Pike, Director at Tourism Economics, the current Wisconsin Department of Tourism's tourism impact vendor. Citation of the reference does not mean endorsement of the views expressed in this report.



Figure 2: CPI Corrected Annual "Tourism Impact" Estimates from 2000 to 2009

However, Figure 1 also shows a counter-trend which is better shown in Figure 2. Looking at the years 2000 to 2009, growth flattened and declined by about 6% between 2000 and 2009. The trend line for this period similarly reflects a decline in "tourism impact."

"Tourism Impact" Economic Estimates Part 2: 2010-2014



Figure 3: CPI Adjusted "Tourism Impact" Estimates from 2010 to 2014

In 2009, the Wisconsin Department of Tourism changed computer models and used generally lower percentages for allocating economic activity to tourism. Figure 3 picks up where Figure 1 and Figure 2 left off. From 2010 to 2014, Figure 3 shows a flat or modestly downward trending "tourism impact."

Estimating the Relative Ranking of Tourism

The annual Tourism Impact estimates from the Wisconsin Department of Tourism largely measure the estimated "economic impact" of tourism in dollars and jobs. However, the estimates do not necessary provide context about where tourism, if it was an economic indicator, would fit into the overall estimated, annual economic output of Grant County. Figure 4 uses the estimated economic output for various economic sectors in Grant County.⁷ The EMSI Data estimates the Gross Regional Product (GRP) for Grant County⁸ —a measure somewhat similar to the national Gross *National* Product but focused on Grant County alone.



Figure 4: Grant County Gross Regional Product Estimate per Economic Sector and Tourism Impact (2013\$) Source EMSI

Figure 4 also includes the 2013 CPI-corrected "tourism impact" estimate for reference—see the orange colored bar and notation. The reference allows some comparative ranking of "tourism impact" against other economic indicators.⁹

Approximately 2.6% of the County's Economic Output

Using the same data as used for Figure 4, according to the estimated GRP, tourism impact accounts for approximately 2.6% of the Grant County estimated annual economic output.

To calculate this estimate, the CPI-standardized GRP for Grant County in 2013 was \$1.67 billion (\$1,665,944,255).¹⁰ The Wisconsin Department

⁷ EMSI Q2 2015 Data Set.

 ⁸ The Gross Regional Product uses an input-output model to measure the estimated economic output of a county.
 ⁹ See

Appendix 1 for additional data and table format. ¹⁰ EMSI Q2 2015 Data Set, Code 55043 (Grant County), 2013. Data provided by the Southwestern Wisconsin Regional Planning Commission.

of Tourism's Tourism Impact Model estimate for tourism spending in Grant County for the same year, 2013, was about \$42.38 million (\$42,383,733).¹¹ Dividing the two figures, "tourism impact" amounts to about 2.6% of the estimated annual economic activity.¹²

Tourism and Jobs

Jobs remain a frequently-cited indicator of economic performance. In Grant County, estimates place total tourism-related employment at about 3.1% of all jobs in the County and employing about 883 people in full-time, part-time, and seasonal positions.

Long-term Tourism Employment Estimates Part 1: 1994 to 2009



Figure 5: Estimated Tourism Employment Per Year 1994 to 2009

The annual "tourism impact" estimate by the Wisconsin Department of Tourism also includes estimates of employment¹³ in the tourism sector. Figure 5 summarizes the employment estimates from 1994 to 2009. The dotted trend line shows growth, and the computer model estimates approximately 35% growth in jobs between 1994 and 2009.

¹² See

¹¹ The year 2013 was used because only 2013 Gross Regional Product figures were available as of this writing.

Appendix 2 for a brief discussion of methodology. ¹³ The computer model estimates or "tourism impact" do not appear to distinguish full-time positions from part-time or seasonal employment.



Figure 6: Estimated Tourism Employment Per Year 2000 to 2009

However, as seen earlier, Figure 5 shows a flattening of job growth starting in about 2000 and then a general decline through 2009.

Tourism Employment Estimates Part 2: 2010 to 2014

Figure 7 picks up where Figure 5 and Figure 6 left off. Figure 7 suggests a continuing decline in tourism jobs. Between 2010 and 2014, the estimated number of tourism jobs fell by about 8%. The dotted trend line shows the decline in estimated tourism jobs. By 2014, estimates place total tourism-related employment in Grant County at 883.



Figure 7: Estimated tourism jobs 2010-2014

Approximately 3.1% of the Workforce in Grant County

Grant County reports a labor force of 28,644 for December 2013, the last year available for comparison—see Figure 8 below. ¹⁴ The numbers

¹⁴ Source: Comprehensive Economic Development Strategy 2014-19 Five Year Report http://swwrpc.org/wordpress/wp-content/uploads/2014/03/CEDS-2014-19-1.pdf

closely parallel estimates by Woods & Poole, which place employment at 28,526 for 2013.¹⁵ The "tourism impact" report estimated 888¹⁶ tourism-related employees in Grant County in 2013. Therefore, dividing, the tourism employment by the total number of jobs accounts for approximately 3.1% of total employment in Grant County.

County	Labor Force	Share of Regional
		Labor Force
Grant	28,644	34.8%
Green	20,845	25.3%
lowa	14.068	17.1%
Lafayette	9,067	11.0%
Richland	9,159	11.7%
Southwest Region	82,257	100.0%

Figure 8: Estimated Civilian Labor Force in Wisconsin including Grant County Source: Wisconsin Department of Workforce Development, LUAS (not seasonally adjusted)

Other Sources of Tourism Information

So far, the analysis largely relies on computer model estimates produced by the Wisconsin Department of Tourism. To avoid reliance on one data source, alternative data sources and analysis techniques were applied to try to independently analyze "tourism impact."

Hotel Room Tax Reflects Tourism Trends

The Hotel Room Tax provides insight into both overnight-tourism capacity and into the distribution of tourism in Grant County. In Grant County, Hotel Room Tax collections remained fairly stable over the past ten years with some upward trends—see Table 2 and Figure 9.¹⁷

Municipalities elect to collect a room tax for overnight lodging. Seventy percent (70%) of room tax revenues must go directly to tourism. Twenty-eight percent (28%) goes to the municipality and 2% goes to the hotel venue charging the tax for administration costs.¹⁸ Three municipalities now collect Room Tax of 5% —Boscobel, Lancaster, and Platteville.¹⁹

Data summarized in Table 2²⁰ suggests that the estimated, average annual amount of overnight accommodations in Grant County subject to Hotel Room Tax is about \$2.7 million. Applying the appropriate tax rates, those levels of room usage result in about \$82,090 in taxes per

 $^{\rm 16}$ See the Wisconsin Tourism's County Total Economic Impact at

http://industry.travelwisconsin.com/research/economic-impact.

¹⁵ Woods & Poole (2015).

¹⁷ Data obtained by an Open Records request from the Wisconsin Department of Revenue.

 ¹⁸ See Wis. Stat. 66.0615(1m) at http://www.wisconsinlodging.org/roomtax.
 ¹⁹ Platteville recently increased the rate to 5% from 4%. Four percent is used here for historical reasons.

²⁰ Hotel Room Tax collections obtained from the Wisconsin Department of Revenue via an Open Records request.

year for tourism promotion in municipalities collecting a Hotel Room Tax.

	Boscobel	Lancaster	Platteville	Totals
Room Tax Rate	5.0%	5.0%	4.0%	
Average Annual Room				
Tax Revenues	\$22,891	\$13 <i>,</i> 690	\$80,691	\$117,272
Average Annual Room Rental Revenues				
(Room Tax Rate)	\$457,818	\$273 <i>,</i> 796	\$2,017,271	\$2,748,885
Average Room Nights				
(\$120)	3,815	2,282	16,811	22,907
Estimated Average Amount to Tourism	\$16,024	\$9 <i>,</i> 583	\$56,484	\$82,090
Estimated Average Amount to				
Municipality	\$6,409	\$3,833	\$22,593	\$32,836
Estimated Average	¢1E9	¢274	¢1 614	¢2 245
Amount to venues	Ş458	ŞZ/4	Ş1,014	şz,345

Table 2: Summary of Hotel Room Tax collections in Grant County, Wisconsin

Figure 9 plots the Hotel Room Tax collections over time. Figure 9 suggests that Hotel Room Tax revenues remained largely flat for the past ten years but with some upward trends. The relatively flat trend



suggested by the Hotel Room Tax analysis parallels the flat or declining "tourism impact" estimates noted above.

However, the Hotel Room Tax data poses a perplexing question: is the Hotel Room Tax flat because "tourism impact" was flat (people simply not staying overnight) or is *hotel room capacity* acting as a limiter on tourism (no beds to put heads in)? In part, the flat Hotel Room Tax numbers might reflect the reality of limited, tourism-class, hotel accommodations in Grant County.²¹ This limitation may also be suggested by the Trade Area Analysis discussed later in this article.

Location Quotient (LQ) Trends 1969-2014²²

In 2013, University of Wisconsin Extension, in cooperation with other entities, performed a basic analysis of tourism in Grant County.²³ One portion of that analysis used employment sector data to estimate the Location Quotient (LQ).²⁴ Part of the report concluded, based on LQ analysis, that "'[t]ourism' is 'not a strength for [Grant] [C]ounty's economy'"²⁵ and that that tourism-related industries are not a "'powerhouse' for Grant County."²⁶

While the 2013 study was insightful, Figure 10 demonstrates an updated LQ analysis based upon employment in Grant County as compared to Wisconsin Paralleling the 2013 analysis, from 1969 to 2014, the LQ for tourism-industry-related employment declined. Interpreting the LQ is beyond the scope of this analysis, but, at minimum, the LQ trend suggests a proportional weakening of tourismrelated employment in Grant County over time as compared to Wisconsin overall. Part of the weakening may be attributed to the growth of other industries such as agriculture or manufacturing. But, as several data sources suggest, the LQ may suggest that tourism is a weak part of the Grant County economy.

²¹ While beyond the scope of this article, preliminary analysis using the Hotel Room Tax indicates an average of 75 rooms leased per night in the communities with a Hotel Room Tax assuming an average room rate of \$100. This may indicate remarkably low capacity in the county. Also, anecdotal evidence suggests that all of those room-nights may not be tourism-driven due to the University of Wisconsin-Platteville, Southwest Tech, and construction and other service personnel leasing rooms.

²² The data in this section and charts were provided by Dr. Steve C. Deller, Agricultural & Applied Economics. His help is greatly appreciated in locating and analyzing this data.

²³ See Todd W. Johnson, Grant County Tourism: Economics, Investments & Impacts, University of Wisconsin Extension, (Sept. 2013) at http://grant.uwex.edu/files/2014/12/Tourism-Workshop-Economic-Impacts1.pdf.

²⁴ A location quotient (LQ) is an economic analysis tool that compares the share of employment per standard industry classification to some reference area. The reference point is 1.0. A LQ of less than 1.0 represents employment levels in an industry sector that is comparatively low. Numbers higher than 1.0 represent employment levels in an industry sector that are comparatively high. For example, assume a comparison to relative tourism employment in the United States. We might expect Orlando, Florida, home to Disneyworld, to have a LQ much higher than 1.0 because Orlando is a strong tourism destination. See, e.g., Bureau of Labor Statistics, *Help & Tutorials: Location Quotient*, http://www.bls.gov/help/def/lq.htm.

²⁵ See Economics of Tourism: Grant County in Grant County Tourism: Economics, Investments & Impacts, 6 (Sept. 24, 2013).

²⁶ Economics of Tourism: Grant County in Grant County Tourism: Economics, Investments & Impacts, 9 (Sept. 24, 2013).

Figure 10: LQ Trends in Employment

Figure 10 analyzes the LQ data based on comparing *employment* in tourism-related-industries between Grant County and Wisconsin. The LQ here shows the relative "strength" of employment in the referenced sector as compared to Wisconsin in general.

For Accommodations & Food Services, the graphs show an overall decline in employment "strength" with a sharp decline in employment "strength" starting in 2003. That decline directly parallels the decline shown in Figure 5 and Figure 7 above. However, the LQ analysis here provides a comparative analysis of the decline. Not only did employment decline in real numbers, see Figure 5 and Figure 7 above, but comparatively speaking, tourism employment moved from a "strength" for the Grant County economy in the 1960s and 1970s, to a "weakness" by 2003.



Figure 10: Employment LQ Trend for Tourism-related Industries Source: Woods and Poole, Inc. and UW-Extension Grant County

For *Arts, Entertainment & Recreation*, as shown in Figure 10, the LQ analysis shows a weakening sector for employment. While never a strength, the *Arts, Entertainment & Recreation* continues to "weaken" compared to Wisconsin. Because the *Arts, Entertainment & Recreation* Sector might be a core part of vibrant tourism program, other communities in Wisconsin actively recruit for arts and entertainment professionals.²⁷

²⁷ In northern Wisconsin, communities are actively recruiting artisan and related talent to augment the tourism sector. See, e.g., Eileen Persike, "Creating a New Economy," *Star Journal*, (Jan. 10, 2016) http://www.starjournalnow.com/2016/01/10/creating-a-new-economy/

Figure 11: LQ Trends in Earnings

Figure 11 analyzes the LQ data based on comparing earnings in tourismrelated-industries between Grant County and Wisconsin. For *Accommodations & Food Services*, the graphs suggest an overall decline with a sharper decline starting in 2000. That decline apparently parallels the decline shown in Figure 1 and Figure 3 above.

Figure 11 also shows a largely flat LQ for *Arts, Entertainment & Recreation* earnings. The graph shows that the *Arts, Entertainment & Recreation* earnings sector showed little or no sustained gains in comparative earnings in 40 years when compared to the rest of Wisconsin.



Figure 11: Earnings LQ Trend for Tourism-related Industries Source: Woods and Poole, Inc. and UW-Extension Grant County

Comparison with State & National Indexes

While LQ analysis provides some comparative context, indexes may show how Grant County "stacks-up" on a state and national scale. Indexes help to answer the strategic questions:

- 1. where does Grant County stack-up compared to state and national trends? and
- 2. is there a state or national trend of flat or declining "tourism impact" that may explain Grant County's situation?

The indexes indicate that Grant County lags behind tourism trends in both Wisconsin and United States.

Employment Indexes Related to Tourism

Figure 12 illustrates the indexed growth rate for employment in *Arts, Entertainment & Recreation.* The graph suggests that employment in *Arts, Entertainment & Recreation* grew by almost 400% on average in the United States. Wisconsin showed similar growth of about 315%. The

index shows that Grant County, for the same time-period, showed growth of approximately 160%.



Figure 12: Employment Growth Index for Arts, Entertainment & Recreation (1969 to 2014)²⁸

Figure 13 illustrates the indexed growth rate for employment for *Accommodation & Food Services* from 1969 to 2014. The plot suggests that employment in *Accommodation & Food Services* grew by almost 330% on average in the United States. Wisconsin statewide showed similar growth about 250%. The index shows that Grant County, for the same time-period, showed growth of approximately 120%.²⁹

²⁸ Source: Woods & Poole, Steve Deller

²⁹ Applying the financial Rule of 70, this is a growth rate of approximately 0.33% per year and about 200 years to double.



Figure 13: Employment Growth Index for Accommodation & Food Services 1969 to 2014^{30}

Trade Area Analysis³¹

A recent study provided a trade area analysis for Wisconsin by county.³² A trade area analysis attempts to estimate the "flows" of economic output between geographic regions. "Strong" regions have positive inflows (meaning they attract economic activity) and "weak" regions have outflows (meaning persons shop elsewhere). The trade area analysis confirms the overall weakness³³ in the tourism-related sectors in Grant County.

In a trade area analysis, a number above 1.0 indicates that the industry sector in the region in a "strength" because the geographic region show a positive inflow of external dollars. A number below 1.0 indicates that the industry sector in the region in a "weakness" because the geographic

³⁰ Source: Woods & Poole, Steve Deller

³¹ A trade area analysis essentially looks at the overall flow of retail sales per industry and per a geographic area—counties in this case. The analysis attempts to identify surpluses and leakages. Surpluses occur when the actual sales exceed the estimated sales for that geographic area—assuming that dollars flowed into the county in a surplus. In contrast, Leakages occur when the actual sales fell below the estimated sales for that geographic area assuming that dollars flowed out of the county as leakage. Conceptually, regions "compete" for sales dollars per industry trying to maximize surpluses and minimize leakages. Steven C. Deller, A Trade Area Analysis of Wisconsin Retail and Service Markets: Updated for 2014, Department of Agriculture and Applied Economics, 3-8 (August 2015).

 ³² Steven C. Deller, A Trade Area Analysis of Wisconsin Retail and Service Markets: Updated for 2014, Department of Agriculture and Applied Economics, 3-8 (August 2015).

 ³³ Steven C. Deller, A Trade Area Analysis of Wisconsin Retail and Service Markets: Updated for 2014, Department of Agriculture and Applied Economics, 3-8 (August 2015).

region shows an inability to "capture" sales within the geographic region and leading to negative outflows of dollars. Ideally, a region wants to enhance inflows and reduce outflows.

Table 3 summarizes the trade area analysis computations for Grant County for the three sectors related to tourism.

Table 3: Trade Area Analysis

	Accommodations	Food Services	Amusement, Gambling & Recreation
Grant County ³⁴	0.23	0.66	0.76

All of the tourism-related computations in Table 3 represent trade-areaanalysis "leakages" or "weaknesses"—cases where dollars are being "lost" from Grant County to other geographic regions.³⁵

While all of the sectors show weakness, *Accommodations* is again very weak—also as suggested in the discussion above on Hotel Room Taxes. The trade area quotient of 0.23 for *Accommodations* shows significant outflows to other areas. Thus, potential tourists may be staying in geographically close areas such as Dodgeville, Prairie du Chien, Galena, and Dubuque rather than in Grant County.

Trade area analysis, while understandably limited, provides key insights into "flows" of economic activity and helps to identify "strong" and "weak" sectors. The analysis suggests relative weakness of the three, core tourism-related sectors in Grant County.

Summary

The data and analyses in this preliminary study of tourism in Grant County provide longer-term perspectives. As a preliminary study, additional work would be required to attempt to identify why the data and trends may be occurring.

For policymakers, the data suggest that estimated "tourism impact" appears flat or slightly declining during the past 10 years. Likewise, the data show that tourism employment appears flat or slightly declining over the past 10 years. Other tourism-related data, such as Hotel Room Tax, LQ analysis, index analysis, and trade-area analysis suggest that tourism growth in Grant County remains fairly flat and weak. Furthermore, the index analysis suggests a widening gap between Grant County's tourism performance and state and national trends.

 ³⁴ Steven C. Deller, A Trade Area Analysis of Wisconsin Retail and Service Markets: Updated for 2014, Department of Agriculture and Applied Economics, 17 (Table 4) (August 2015).

³⁵ In contrast, Grant County shows a "strength" or "surplus" in the "Repair & Maintenance" sector—with a 1.45.

Appendix 1: Gross Regional Product Data Summary

The following tables supplement Figure 4. The Gross Regional Product information was from EMSI data.³⁶ The "tourism impact" estimate derives from the CPI-corrected 2013 annual computer model estimate received by Open Records from the Wisconsin Department of Tourism.³⁷

Industry	Gross Regional Product
Government	\$281,241,138
Manufacturing	\$232,107,050
Crop and Animal Production	\$199,228,505
Other Vectors	\$130,270,183
Retail Trade	\$110,848,574
Health Care and Social Assistance	\$101,487,201
Real Estate and Rental and Leasing	\$94,435,702
Finance and Insurance	\$80,235,249
Wholesale Trade	\$70,944,791
Construction	\$59,079,790
Utilities	\$59,065,539
"Tourism impact" estimate	\$42,383,733
Transportation and Warehousing	\$37,833,292
Administrative and Support and Waste	\$32,856,102
Management and Remediation Services	
Professional, Scientific, and Technical Services	\$30,795,955
Other Services (except Public Administration)	\$27,718,897
Accommodation and Food Services	\$26,737,065
Information	\$25,594,207
Management of Companies and Enterprises	\$16,705,527
Arts, Entertainment, and Recreation	\$5,996,983
Mining, Quarrying, and Oil and Gas Extraction	\$3,234,904
Educational Services	\$2,065,598
Total GRP	\$1,628,482,250

Table 4: Gross Regional Product Estimates for Grant County by Industry and Sorted from High to Low, Source EMSI

The percentages in Table 5 are estimates and are computed by dividing each respective economic sector or "tourism impact" by the total Gross Regional Product (GRP).

 ³⁶ EMSI Q2 2015 Data Set, Code 55043 (Grant County), 2013. Data provided by request from the Southwestern Wisconsin Regional Planning Commission.
 ³⁷ See Wisconsin Department of Tourism, Wisconsin Economic Impact Research, <u>http://industry.travelwisconsin.com/research/economic-impact</u>.

Industry	Percentage of Gross Regional Product
Government	17.3%
Manufacturing	14.3%
Crop and Animal Production	12.2%
Other Vectors	8.0%
Retail Trade	6.8%
Health Care and Social Assistance	6.2%
Real Estate and Rental and Leasing	5.8%
Finance and Insurance	4.9%
Wholesale Trade	4.4%
Construction	3.6%
Utilities	3.6%
"Tourism impact" estimate	2.6%
Transportation and Warehousing	2.3%
Administrative and Support and Waste	2.0%
Management and Remediation Services	
Professional, Scientific, and Technical Services	1.9%
Other Services (except Public Administration)	1.7%
Accommodation and Food Services	1.6%
Information	1.6%
Management of Companies and Enterprises	1.0%
Arts, Entertainment, and Recreation	0.4%
Mining, Quarrying, and Oil and Gas Extraction	0.2%
Educational Services	0.1%
Total	100%

 Table 5: Percentage of Gross Regional Product by Sector (\$2013)

Appendix 2: Methodology Note

As noted earlier, tourism is not an economic sector. Instead, computer models or other methods attempt to allocate portions of tracked economic sectors to tourism. See Table 1 for a better description of how this modeling works and the assumptions made.

However, the "tourism impact" alone does not answer basic strategic questions such as "how big is tourism in the Grant County economy?" and does not allow for easy comparison of tourism estimates with other economic sectors such as agriculture, manufacturing, or healthcare services.

The method used here effectively compares the "tourism impact" estimates with other estimates of economic indicators to provide contextual information about tourism. The method used here dives the tourism estimate by the estimated GRP to provide a ratio. This ratio is about 2.6%. As Table 4 and Table 5 summarize, the same method can provide estimates of the relative ranking for other economic sectors in Grant County.

However, the reader should remember that "tourism impact" estimate allocates portions of other economic sectors to tourism. In other words, "tourism impact" takes X% of all *Arts, Entertainment, & Recreation* or Y% of all *Retail Trade* and allocates that percentage to the "tourism impact." This creates a minor issue when trying to then compare tourism impact to the originating sectors because those sectors include all economic activity—regardless of tourism "association"—and we do not know the precise percentages that the computer model uses.

To avoid confusion, the method suggested provides a reasonable comparative estimating capability. Even if we "back out" tourism from the overall GRP (subtract the tourism impact estimate from the total GRP), the estimated ratio of "tourism impact" to overall GRP becomes 2.67%. This method is not used here because it essentially, and without support, "discounts" the GRP.

More troubling would be suggestions that somehow one must include all "tourism related" economic sectors into the calculation. First, the Wisconsin Department of Tourism's computer model already does this so such suggestions would double-count tourism. Second, such suggestions would grossly over-estimate "tourism impact." For example, and this researcher does not posit this method as sound, even if all *Retail Trade*, all *Accommodation and Food Services*, and all *Arts*, *Entertainment, and Recreation* sectors were aggregated and 100% allocated to tourism, those aggregated sectors account for approximately 8.7% of the GRP.

Thus, the simple, but effective, method suggested here takes into account the inherent allocations from within the "tourism impact" computer model and simply provides a relative ratio to the estimated GRP.